

## Falls Lake Project Drought Update—23 October 2001

1. **Tabulated Falls Lake Project Watershed Rainfall and Inflows.** As shown in Table One below, only 12 out of the past 41 months had above average rainfall and nine of the past 41 months had average monthly inflows greater than average since June 1998. Over the past 41 months, inflows overall trended about 92 percent of average although rainfall has averaged 96 percent of normal. The inflow averages are biased by the rains received during the tropical season in 1999 when Hurricane Floyd dumped tremendous amounts of water along parts of eastern and south central North Carolina. The inflows during September 1999 were 1477 percent of normal. Additionally, if this month were removed from the table below, the average inflow since June 1998 into Falls Dam would be reduced from 92 to 65 percent of normal. Note that the guide curve or target level at Falls Lake is at elevation 251.5 feet, msl year round.

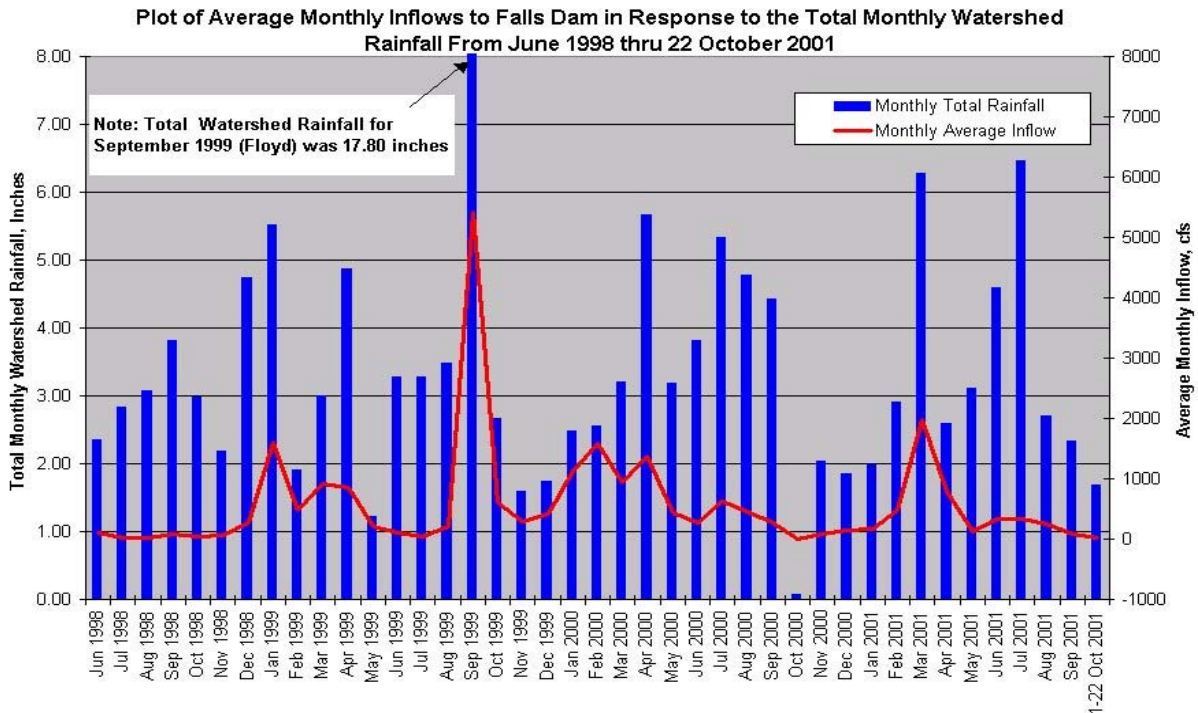
Table One  
Falls Lake--Inflows, Rainfall, and Lake Levels  
From June 1998 to Present

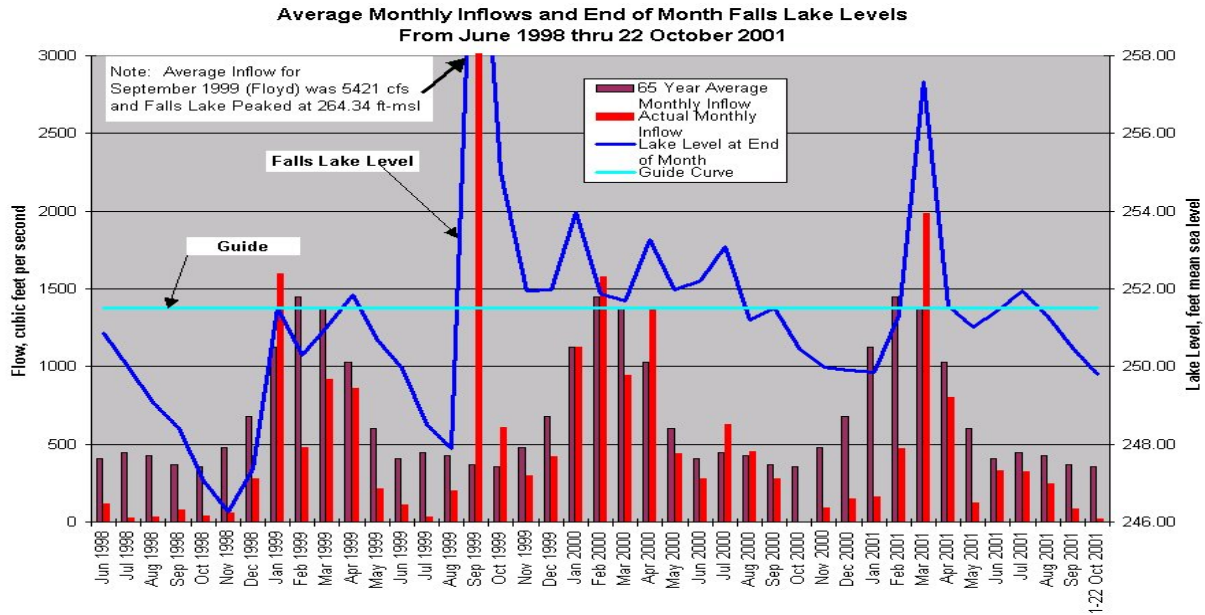
	Inflow to Falls Dam			Watershed Rainfall			Lake
	Long	Percent		Long	Percent		Level
	Term	of		Term	of		End of
	Avg	Actual	Normal	Avg	Actual	Normal	Month
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Jun 1998	408	114	28	3.84	2.36	61	250.85
Jul 1998	445	28	6	4.83	2.83	59	249.97
Aug 1998	429	31	7	4.50	3.07	68	249.09
Sep 1998	367	80	22	3.52	3.82	109	248.40
Oct 1998	356	37	10	3.13	2.99	96	247.06
Nov 1998	480	57	12	3.16	2.19	69	246.27
Dec 1998	678	278	41	3.24	4.75	147	247.38
Jan 1999	1125	1598	142	3.64	5.51	151	251.51
Feb 1999	1449	480	33	3.43	1.90	55	250.29
Mar 1999	1371	919	67	3.99	3.00	75	251.03
Apr 1999	1031	859	83	3.39	4.87	144	251.84
May 1999	604	214	35	3.88	1.22	31	250.68
Jun 1999	408	110	27	3.84	3.28	85	249.95
Jul 1999	445	34	8	4.83	3.28	68	248.51
Aug 1999	429	201	47	4.50	3.48	77	247.90
Sep 1999	367	5421	1477	3.52	17.80	506	264.25
Oct 1999	356	607	171	3.13	2.67	85	255.00
Nov 1999	480	296	62	3.16	1.59	50	251.95
Dec 1999	678	419	62	3.24	1.74	54	251.98
Jan 2000	1125	1127	100	3.64	2.48	68	253.97
Feb 2000	1449	1579	109	3.43	2.56	75	251.86
Mar 2000	1371	941	69	3.99	3.20	80	251.69
Apr 2000	1031	1372	133	3.39	5.66	167	253.27
May 2000	604	441	73	3.88	3.18	82	251.98
Jun 2000	408	281	69	3.84	3.82	99	252.20
Jul 2000	445	630	142	4.83	5.34	111	253.09
Aug 2000	429	455	106	4.50	4.78	106	251.19
Sep 2000	367	279	76	3.52	4.42	126	251.52
Oct 2000	356	-9	-3	3.13	0.08	3	250.48
Nov 2000	480	91	19	3.16	2.03	64	249.98

Table One (Continued)  
Falls Lake--Inflows, Rainfall, and Lake Levels  
From June 1998 to Present

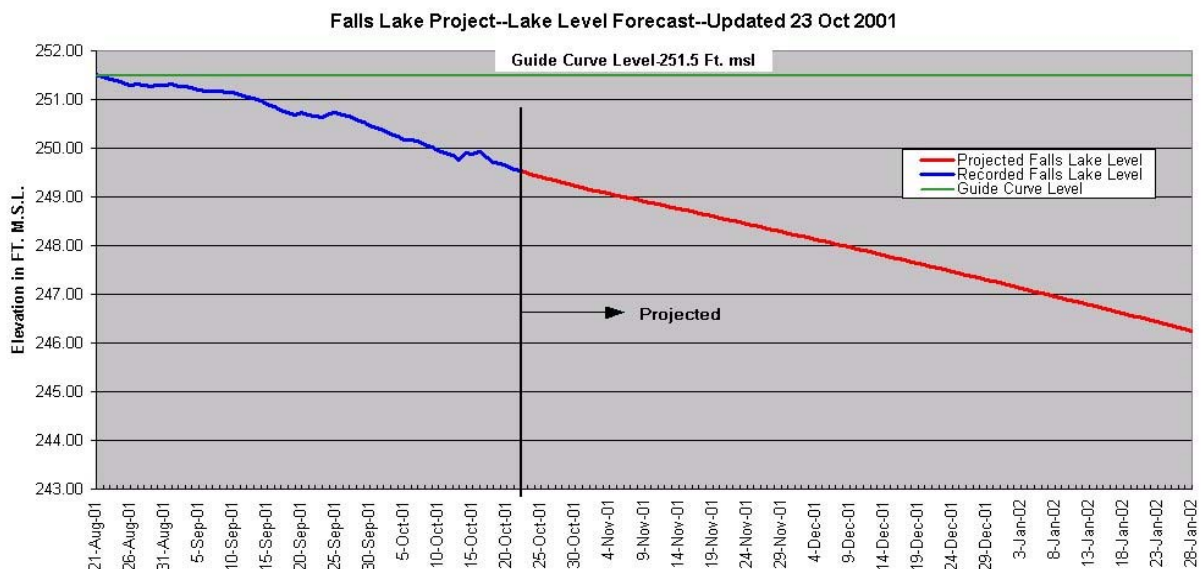
			Inflow to Falls Dam			Watershed Rainfall			Lake
			Long	Percent		Long	Percent		Level
			Term	of		Term	of		End of
			Avg	Actual	Normal	Avg	Actual	Normal	Month
			----	-----	-----	----	-----	-----	Ft-msl
	Dec	2000	678	148	22	3.24	1.85	57	249.90
	Jan	2001	1125	160	14	3.64	1.98	54	249.86
	Feb	2001	1449	473	33	3.43	2.91	85	251.33
	Mar	2001	1371	1986	145	3.99	6.28	157	257.34
	Apr	2001	1031	799	77	3.39	2.60	77	251.57
	May	2001	604	121	20	3.88	3.12	80	251.03
	Jun	2001	408	332	81	3.84	4.59	120	251.43
	Jul	2001	445	326	73	4.83	6.46	134	251.96
	Aug	2001	429	247	58	4.50	2.71	60	251.28
	Sep	2001	367	82	22	3.52	2.33	66	250.47
1-22	Oct	2001	356	17	5	3.13	1.68	54	249.54
Average			689	577	92	3.74	3.57	96	

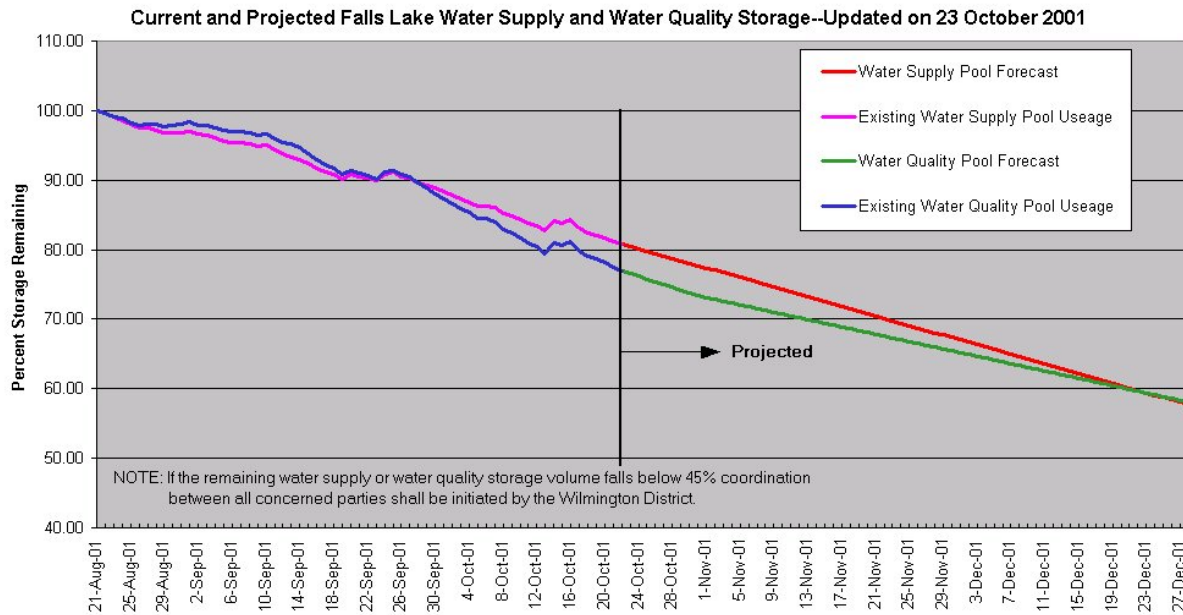
2. **Plotted Falls Lake Project Watershed Rainfall, Project Inflows and End of Month Lake Level.** The plots on the following page illustrate the data in Table One and the relationship between rainfall, resultant net inflow to Falls Dam and the end of month Falls Lake levels. As with the discussion earlier on the Jordan project watershed, the ground water or base flow levels appear to be depressed. This is very obvious in the tabulated data from Table One the inflow percent of normal has plummeted over the few months.





**3. Status of Falls Lake Level, Water Quality Storage, Water Supply Storage:** Conditions continue to get slowly worse for the Falls Lake project. As of this report, Falls Lake is at 249.7 feet, msl or 1.8 feet below guide curve. Recreation will decrease as the lake level decreases. However, recreation in the late fall and winter months decreases naturally. Both the water supply and water quality pools in Falls Lake are fully utilized and are being monitored. Fortunately, the water quality target downstream at Clayton drops from 254 cfs to 184 cfs in November and remains at that level through March. This will certainly help conserve the water quality portion of the conservation pool in Falls Lake. Warnings are issued whenever either the water quality or water supply pool falls to 45 percent of storage remaining. However, prior experiences with droughts support warnings at 60 percent of storage remaining which is not anticipated until much later in the year.





4. **Impacts to Public Recreation Facilities at Falls Lake.** Public recreation facilities at Falls Lake Project are shown below in table two and will be discussed more in detail as the drought continues or worsens.

**Table Two--Public Boat Ramps Falls Lake Project**

Location	Number of Lanes	Bottom Ramp Elevation (feet, m.s.l.)
Eno River Portage Area	1	242
Hickory Hill Access Area	4	232.4
Ledge Rock Access Area	4	241.6
Rolling View (Marina Area)	2	240
Rolling View (Sailing Area)	4	240
Highway 50 Recreation Area	6	232.5
Upper Barton Creek	4	235.3
BW Wells	1	236
Beaverdam Subimpoundment	2	242.5
Holly Point	2	236